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EXAMINER

HARVEY, JULIANNA NANCY

ART UNIT

PAPER NUMBER

3733

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03/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/731,964	Applicant(s) BENZEL ET AL.	
	Examiner Julianna N. Harvey	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

In view of Applicant's amendment to claim 1, the previous rejection of claim 1 is withdrawn.

Claim Rejections - 35 USC § 101

In view of Applicant's amendment to claim 46, the previous rejection of claim 46 is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 7, 8, 12-14, 16-22, 25, 26, 30, 32-34, and 41-47 are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Ross et al. (US 2003/0187506 A1). Regarding **claim 1**, Ross et al. disclose an apparatus for replacing a damaged spinal disc in a spinal column, the apparatus comprising: an artificial disc,

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the artificial disc including a resilient core ("20") having a first surface and a second surface, a first retaining member ("22") connected to the first surface of the resilient core, and a second retaining member ("24") connected to the second surface of the resilient core, the first retaining member having an outer surface engageable with a first vertebra of the spinal column (if one so desired, one could engage the outer surface with a first vertebra) and an inner surface facing the first surface of the resilient core, the second retaining member having an outer surface engageable with a second vertebra of the spinal column (if one so desired, one could engage the outer surface with a second vertebra) and an inner surface facing the second surface of the resilient core, the outer surfaces of the first and second retaining members facing away from each other; and a first mounting member ("14") connectable with the first vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the first mounting member being engageable with the artificial disc after being connected to the first vertebra to guide movement of the artificial disc into position between the first and second vertebrae, the first retaining member including a guide ("30a") with an outer surface that extends outwardly (para. 0041 indicates that the location of the male "30a" and female "30b" dovetails can be reversed) from the outer surface of the first retaining member and that is engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae (Fig. 3B inset). Regarding **claim 4**, Ross et al. disclose that the guide is engageable with the surface of the first vertebra (if one so desired, one could engage the guide with the first vertebra). Regarding **claim 7**, Ross et al. disclose that the first retaining member

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includes a stop engageable with the first mounting member to prevent relative movement between the first retaining member and the first mounting member in a first direction (Fig. 3B inset; keep in mind the reversal of the dovetails "30a" and "30b").

Regarding **claim 8**, Ross et al. disclose that the stop guides movement of the first retaining member relative to the first mounting member in a second direction transverse to the first direction (the retaining member would be able to move into the page but not side-to-side). Regarding **claim 12**, Ross et al. disclose that the first mounting member is engageable with a surgical tool for connecting the first mounting member to the first vertebra (if one so desired, one could engage the mounting member with a surgical tool). Regarding **claim 13**, Ross et al. disclose that the first mounting member includes a recess (para. 0041 indicates that the location of the male and female dovetails can be reversed) into which a portion of the surgical tool extends for connecting the first mounting member to the surgical tool (one could use a surgical tool with a dovetail extension to accomplish this). Regarding **claim 14**, Ross et al. disclose that the first mounting member includes an inner surface (lower surface of "30b") facing the core and spaced from the core, the core deflecting into engagement (indirect engagement through contact with the retaining member) with the inner surface of the first mounting member upon relative movement between the first and second retaining members (Fig. 3B inset; keep in mind the reversal of the dovetails "30a" and "30b"). Regarding **claim 16**, Ross et al. disclose that the first mounting member is prevented from moving relative to the artificial disc when the first mounting member is connected to the artificial disc (para. 0043). Regarding **claim 17**, Ross et al. disclose that the first mounting

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member is connected to the artificial disc with an interference fit (para. 0041).

Regarding **claim 18**, Ross et al. disclose that the first mounting member has a frustoconical surface engageable with a frustoconical surface on the artificial disc (the male and female dovetails are frustoconical surfaces). Regarding **claim 19**, Ross et al. disclose a second mounting member ("16") connectable with the second vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the second mounting member being engageable with the artificial disc to guide movement of the second retaining member into position between the first and second vertebrae (Fig. 3B inset). Regarding **claim 20**, Ross et al. disclose that the guide is a first guide ("30a") engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae, one of the second retaining member and second mounting member including a second guide ("30a") engageable with another of the second retaining member and the second mounting member to guide movement of the second retaining member into position between the first and second vertebrae (Fig. 3B inset; para. 0041 indicates that the location of the male "30a" and female "30b" dovetails can be reversed such that the first and second guides "30a" are located on the first "22" and second "24" retaining members). Regarding **claim 21**, Ross et al. disclose that the second retaining member includes the second guide engageable with the second mounting member (Fig. 3B inset). Regarding **claim 22**, Ross et al. disclose that the second guide extends from the outer surface of the second retaining member and is engageable with the second vertebra (Fig. 3B inset; if one so desired, one could engage the second guide with the

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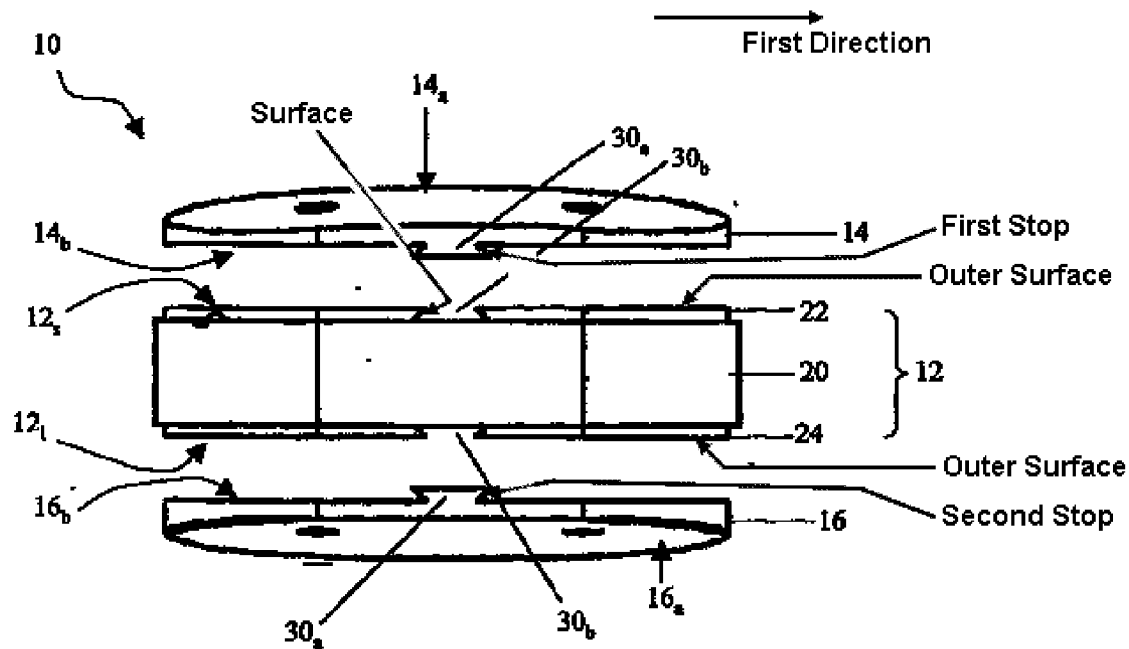
second vertebra). Regarding **claim 25**, Ross et al. disclose that the first retaining member includes a first stop engageable with the first mounting member to prevent relative movement between the first retaining member and the first mounting member in a first direction, the second retaining member including a second stop engageable with the second mounting member to prevent relative movement between the second retaining member and the second mounting member in a first direction (Fig. 3B inset; keep in mind the reversal of the dovetails "30a" and "30b"). Regarding **claim 26**, Ross et al. disclose that the first stop guides movement of the first retaining member relative to the first mounting member in a direction extending transverse to the first direction, the second stop guiding movement of the second retaining member relative to the second mounting member in a direction extending transverse to the first direction (the retaining members would be able to move into the page but not side-to-side). Regarding **claim 30**, Ross et al. disclose that the first mounting member includes an inner surface (lower surface of "14") facing the core and spaced from the core, the core deflecting into engagement (indirect engagement through contact with the retaining member) with the inner surface of the first mounting member upon relative movement between the first and second retaining members, the second mounting member includes an inner surface (upper surface of "16") facing the core and spaced from the core, the core deflecting into engagement with the inner surface of the second mounting member upon relative movement between the first and second retaining members (Fig. 3B inset). Regarding **claim 32**, Ross et al. disclose that the first and second mounting members are prevented from moving relative to the artificial disc when the first and second mounting

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members are connected to the artificial disc (para. 0043). Regarding **claim 33**, Ross et al. disclose that the first and second mounting members are connected to the artificial disc with interference fits (para. 0041). Regarding **claim 34**, Ross et al. disclose that the first and second mounting members have frustoconical surfaces engageable with frustoconical surfaces on the artificial disc (the male and female dovetails are frustoconical surfaces). Regarding **claim 41**, Ross et al. disclose that the first retaining member includes a portion engageable with a surgical tool for inserting the artificial disc between the vertebrae (para. 0047). Regarding **claim 42**, Ross et al. disclose that the second retaining member includes a portion engageable with a surgical tool for inserting the artificial disc between the vertebrae (para. 0047). Regarding **claim 43**, Ross et al. disclose that the portion of the first retaining member includes an opening into which a portion of the surgical tool extends (para. 0047). Regarding **claim 44**, Ross et al. disclose that the second retaining member includes a portion with an opening into which a second portion of the surgical tool extends (para. 0047). Regarding **claim 45**, Ross et al. disclose that the guide is a rib (Fig. 3B inset). Regarding **claim 46**, Ross et al. disclose that the first mounting member ("14") extends out of the first vertebra into engagement with the first retaining member (top part of "12") (Fig. 7). Regarding **claim 47**, Ross et al. disclose that the first mounting member includes a surface extending toward the outer surface of the first retaining member, the surface of the first mounting member engaging the guide to guide movement of the artificial disc into position between the first and second vertebrae (Fig. 3B inset; keep in mind the reversal of the dovetails "30a" and "30b").

Ross et al. (US 2003/0187506 A1)

FIGURE 3B



Claims 1, 19, 27, 37, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Fraser et al. (US 7,060,097 B2). Regarding **claim 1**, Fraser et al. disclose an apparatus for replacing a damaged spinal disc in a spinal column, the apparatus comprising: an artificial disc, the artificial disc including a resilient core ("230") having a first surface and a second surface, a first retaining member ("210") connected to the first surface of the resilient core, and a second retaining member ("220") connected to the second surface of the resilient core, the first retaining member having an outer surface (Fig. 7B inset) engageable with a first vertebra of the spinal column and an inner surface facing the first surface of the resilient core, the second retaining member having an outer surface engageable with a second vertebra of the spinal

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column and an inner surface facing the second surface of the resilient core, the outer surfaces of the first and second retaining members facing away from each other; and a first mounting member ("300") connectable with the first vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the first mounting member being engageable with the artificial disc after being connected to the first vertebra to guide movement of the artificial disc into position between the first and second vertebrae (if one so desired, one could insert the mounting member prior to engaging the mounting member with the retaining member), the first retaining member including a guide (Fig. 7B inset) with an outer surface that extends outwardly from the outer surface of the first retaining member and that is engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae (Fig. 7B inset). Regarding **claim 19**, Fraser et al. disclose a second mounting member ("300") connectable with the second vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the second mounting member being engageable with the artificial disc to guide movement of the second retaining member into position between the first and second vertebrae (Fig. 7B inset). Regarding **claim 27**, Fraser et al. disclose that one of the first retaining member and the first mounting member includes a first guide (Fig. 7B inset) engageable with another of the first retaining member and the first mounting member to guide movement of the first mounting member into an opening (Fig. 7B inset) in the first retaining member, one of the second retaining member and the second mounting member including a second guide (Fig. 7B inset) engageable with another of the second

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retaining member and the second mounting member to guide movement of the second retaining member into an opening (Fig. 7B inset) in the second retaining member (Fig. 7B inset). Regarding **claim 37**, Fraser et al. disclose that one of the first and second retaining members includes a flange (Fig. 7B inset) extending toward another of the first and second retaining members, the flange having a radially inner surface facing the core and spaced from the core, the core deflecting into engagement with the radially inner surface upon relative movement between the first and second retaining members (because the core is flexible, if one so desired, one could compress the apparatus to deflect the core into engagement with the inner surface). Regarding **claim 38**, Fraser et al. disclose that the first retaining member includes the flange extending toward the second retaining member, the core deflecting into engagement with the radially inner surface of the flange upon relative movement between the first and second retaining members, the second retaining member including a flange (Fig. 7B inset) extending toward the first retaining member, the flange of the second retaining member having a radially inner surface facing the core and spaced from the core, the core deflecting into engagement with the radially inner surface of the flange of the second retaining member upon relative movement between the first and second retaining members.

FIG. 7B

Claims 1, 9-11, 19, 28, and 29 are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Ross et al. (US 2003/0187506 A1). Regarding **claim 1**, Ross et al. disclose an apparatus for replacing a damaged spinal disc in a spinal column, the apparatus comprising: an artificial disc, the artificial disc including a resilient core (“20”) having a first surface and a second surface, a first retaining member (“22”) connected to the first surface of the resilient core, and a second retaining member (“24”) connected to the second surface of the resilient core, the first retaining member having an outer surface engageable with a first vertebra of the spinal column (if one so desired, one could engage the outer surface with a first vertebra) and an inner surface facing the first surface of the resilient core, the second retaining member having an outer surface engageable with a second vertebra of the spinal column (if one so desired, one could engage the outer surface with a second vertebra) and an inner

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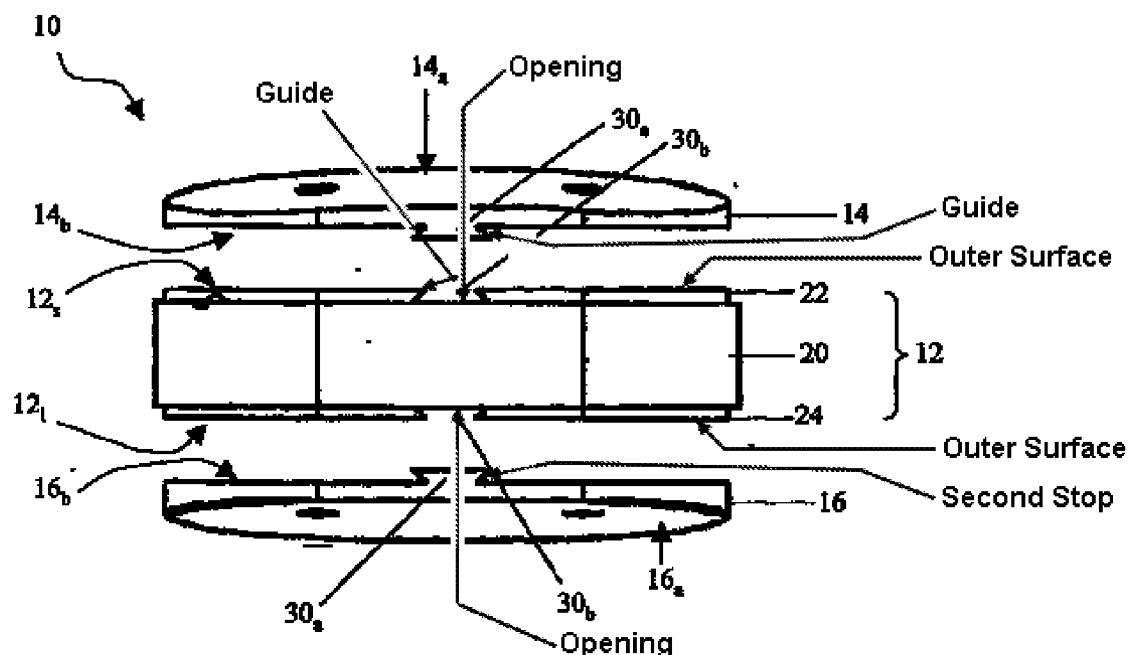
surface facing the second surface of the resilient core, the outer surfaces of the first and second retaining members facing away from each other; and a first mounting member ("14") connectable with the first vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the first mounting member being engageable with the artificial disc after being connected to the first vertebra to guide movement of the artificial disc into position between the first and second vertebrae, the first retaining member including a guide with an outer surface that extends outwardly from the outer surface of the first retaining member and that is engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae (Fig. 3B inset). Regarding **claim 9**, Ross et al. disclose that one of the first retaining member and the first mounting member includes a guide engageable with another of the first retaining member and the first mounting member to guide movement of the first mounting member into an opening in the first retaining member (Fig. 3B inset). Regarding **claim 10**, Ross et al. disclose that the first retaining member has an opening extending through the inner and outer surfaces of the first retaining member, the first mounting member extending into the opening (Fig. 3B inset). Regarding **claim 11**, Ross et al. disclose that the opening extends axially through the inner and outer surfaces of the first retaining member (Fig. 3B inset). Regarding **claim 19**, Ross et al. disclose a second mounting member ("16") connectable with the second vertebra and the artificial disc to position the artificial disc between the first and second vertebrae, the second mounting member being engageable with the artificial disc to guide movement of the second retaining member

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into position between the first and second vertebrae (Fig. 3B inset). Regarding **claim 28**, Ross et al. disclose that the first retaining member has an opening extending through the inner and outer surfaces of the first retaining member, the first mounting member extending into the opening in the first retaining member, the second retaining member having an opening extending through the inner and outer surfaces of the second retaining member, the second mounting member extending into the opening in the second retaining member (Fig. 3B inset). Regarding **claim 29**, Ross et al. disclose that the opening in the first retaining member extends axially through the inner and outer surfaces of the first retaining member and that the opening in the second retaining member extends axially through the inner and outer surfaces of the second retaining member (Fig. 3B inset).

Ross et al. (US 2003/0187506 A1)

FIGURE 3B



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, 23, 24, 31, 39, and 40 are rejected under 35 U.S.C. 103(a) as being obvious over Ross et al. (US 2003/0187506 A1; the rejection beginning on page 2).

Regarding **claim 23**, Ross et al. disclose that one of the second retaining member and second mounting member include a third guide ("30a") engageable with another of the second retaining member and the second mounting member to guide movement of the second retaining member into position between the first and second vertebrae (Fig. 3B inset; para. 0041 indicates that the location of the male "30a" and female "30b" dovetails can be reversed such that the first and second guides "30a" are located on the first "22" and second "24" retaining members). Regarding **claims 5 and 23**, Ross et al. fail to disclose that the first retaining member also includes a second guide engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae (claim 5) and that the first retaining member also includes a second guide engageable with the first mounting member to guide movement of the first retaining member into position between the first and second vertebrae, one of the second retaining member and second mounting member including a fourth guide engageable with another of the second retaining member and second mounting member to guide movement of the second retaining member into position

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between the first and second vertebrae (claim 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the Ross et al. retaining member with a second guide and a fourth guide, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Regarding **claim 24**, Ross et al. disclose that the second retaining member includes the third guide (and per the analysis of claim 23 above, it would have been obvious for the second retaining member to include the fourth guide). Regarding **claims 6 and 24**, Ross et al. fail to disclose that the first and second guides extend generally parallel to each other (claim 6) and that the first and second guides extend generally parallel to each other, the third and fourth guides extending generally parallel to each other (claim 24). However, it would have been obvious to one of ordinary skill in the art to construct the first and second guides such that they are generally parallel to each other and the third and fourth guides such that they are generally parallel to each other as doing so would be required to maintain function of the device (slidable mating of “22” with “14” and “24” with “16”). Regarding **claim 31**, Ross et al. fail to disclose that the inner surfaces of the first and second mounting members are concave. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to form the inner surfaces of the first and second mounting members such that they are concave, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing inner surfaces of the mounting

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members. *In re Dailey and Eilers*, 149 USPQ 47 (1966). Regarding **claims 39 and 40**, Ross et al. fail to disclose that the inner surface of the first retaining member is concave, the first surface of the resilient core being convex (claim 39) and that the inner surface of the second retaining member is concave, the second surface of the resilient core being convex (claim 40). It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the inner surfaces of the first and second retaining members such that they are concave and the first and second surfaces of the resilient core such that they are convex, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing the retaining members and the resilient core with complementary surfaces. *In re Dailey and Eilers*, 149 USPQ 47 (1966).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. (US 2003/0187506 A1; the rejection beginning on page 2) in view of Fraser et al. (US 7,060,097 B2). Ross et al. disclose the claimed invention except that the inner surface of the first mounting member is concave. However, Ross et al. teach that the dovetail connecting elements ("30a" and "30b") can be replaced by a variety of other complementary connecting elements (para. 0041). Fraser et al. teach that such complementary connecting elements can include a concave recess ("240") (Fig. 12B; col. 5, lines 30-32). It would have been obvious to one of ordinary skill in the art to modify the Ross et al. apparatus such that the connecting elements comprise a concave recess, as opposed to a dovetailed recess, as suggested by Fraser et al., as doing so is

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a simple substitution of one known element for another to obtain predictable results. In view of such a modification, the inner surface of the first mounting member would be concave.

Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser et al. (US 7,060,097 B2) in view of Baumgartner (US 5,370,697 A). Fraser et al. disclose that the core includes a radially outer surface (side surface of "230") extending between the first and second surfaces of the core (Fig. 7B). Fraser et al. fail to disclose that the radially outer surface faces a portion of one of the first and second retaining members, the radially outer surface being spaced from the portion of the one of the first and second retaining members, the core deflecting into engagement with the portion of one of the first and second retaining members upon relative movement between the first and second retaining members (**claim 35**) and that the radially outer surface of the core faces a portion of the first retaining member, the radially outer surface of the core being spaced from the portion of the first retaining member, the core deflecting into engagement with the portion of the first retaining member upon relative movement between the first and second retaining members, the radially outer surface facing a portion of the second retaining member, the radially outer surface being spaced from the portion of the second retaining member, the core deflecting into engagement with the portion of the second retaining member upon relative movement between the first and second retaining members (**claim 36**). Baumgartner discloses an apparatus comprising first ("2" in Fig. 1a) and second ("3" in Fig. 1a) retaining members and a resilient core ("23" in Fig. 1a). The resilient core has a radially extending outer surface

(side surface of "23" in Fig. 1a) wherein a portion ("21" in Fig. 1a) of each of the first and second retaining members faces and is spaced from the radially extending outer surface. Because the core is made from an elastomer (col. 3, lines 19-20), one could compress the apparatus sufficiently to deflect the core into engagement with the portion of each of the first and second retaining members. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fraser et al. such that the first and second retaining members have portions facing and spaced from the radially outer surface of the core, as suggested by Baumgartner, as such portions could be used as means to restrict movement between the retaining members.

Response to Arguments

Applicant's arguments filed 25 February 2009 with respect to the rejection of claim 1 over Ross et al. (US 2003/0187506 A1; embodiment of Fig. 3B) have been fully considered but they are not persuasive. Applicant argues that "if the member 14 of Ross is engageable with the artificial disc to guide movement of the artificial disc into position between the first and second vertebrae, there is no possibility of the member 22 of Ross engaging a vertebra. Specifically, if the members 22 and 24 are already engaged with vertebrae, the member 22 cannot be guided into position between the vertebrae by the member 14 of Ross. If, on the other hand, the member 14 of Ross is engageable with the member 22 of Ross after being connected to the first vertebra to guide movement of the artificial disc into position between the first and second vertebrae, as would be required by claim 1, the member 14 of Ross would fully cover

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the outer surface of the member 22 of Ross... Thus, there would be no possibility of the outer surface of the member 22 of Ross...being engaged with a vertebra after the artificial disc is in position between the first and second vertebrae" (pages 18-19). The examiner respectfully disagrees. First of all, claim 1 never recites that the outer surface of the retaining member is engageable with the vertebra after the artificial disc is in position between the vertebrae. In addition, the outer surface of the Ross retaining member ("22") can engage the vertebra at least indirectly through the Ross mounting member ("14") after the artificial disc is in position between the vertebrae.

Applicant's arguments filed 25 February 2009 with respect to the rejection of claim 1 over Fraser et al. (US 7,060,097 B1) have been fully considered but they are not persuasive. Applicant argues that the "hypothetical insertion and in-situ assembly of the apparatus of Fraser is...contrary to the only disclosure in Fraser regarding insertion of the apparatus between two vertebrae, which is set out at column 4, line 51 to column 5, line 22 of Fraser" (page 27). The examiner respectfully disagrees. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Because the Fraser mounting member ("300") can be inserted separately from the retaining member ("210"), as evidenced by col. 4, line 51 through col. 5, line 22 of Fraser, and the Fraser mounting member contains securing features ("304") to engage the vertebra (col. 5, lines 35-44 of Fraser), the

structure of the Fraser apparatus is capable of performing the intended use and therefore meets the claim.

Applicant's arguments, see pages 22-23, filed 25 February 2009, with respect to the rejection(s) of claim(s) 1, 9-11, 14, 15, 35, and 36 over Harrington have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ross et al. (claims 9-11, 14, and 15) or Fraser et al. (claims 35 and 36).

Applicant's arguments, see pages 30-32, filed 25 February 2009, with respect to the rejection(s) of claim(s) 1, 19, 28, and 29 over Ross et al. (embodiment shown in Fig. 5) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ross et al. (Fig. 3 embodiment).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julianna N. Harvey whose telephone number is 571-270-3815. The examiner can normally be reached on Mon. - Fri., until 2:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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/J. N. H./

Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733